

Partners in Plastic Reduction: Working with the public to reduce their plastic consumption

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What is marine debris?

“Marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.” (NOAA Marine Debris Program)



Types of Marine Debris

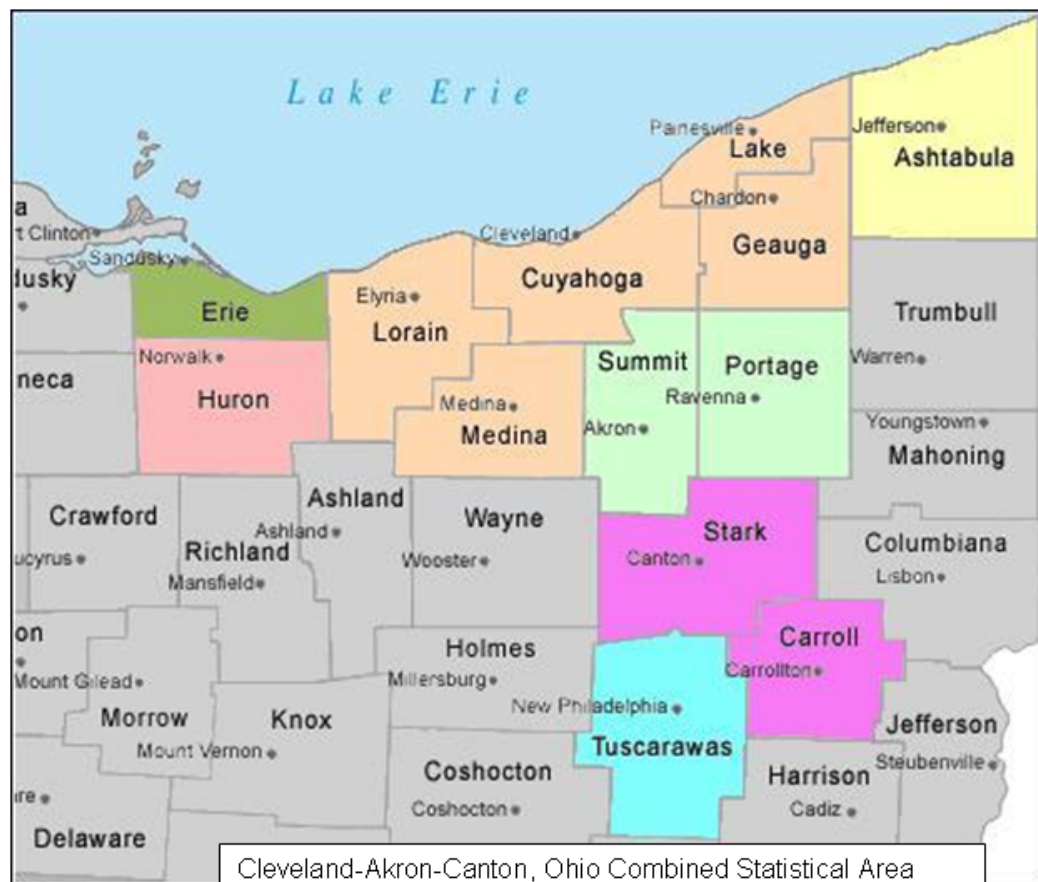


Credit: Connie Murzyn

80% of what is found on beach cleanups in the Great Lakes is plastic.

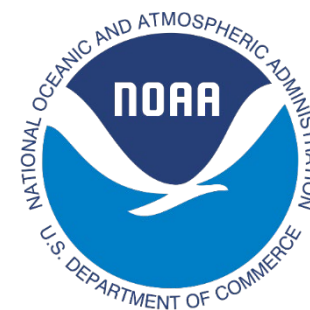
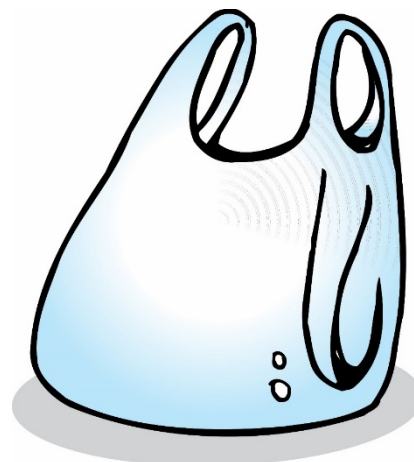


NEO Plastics Project



Cleveland-Akron-Canton, Ohio Combined Statistical Area

- Cleveland-Elyria, Ohio Metropolitan Statistical Area
- Akron, Ohio Metropolitan Statistical Area
- Canton-Massillon, Ohio Metropolitan Statistical Area
- Ashtabula, Ohio Micropolitan Statistical Area
- New Philadelphia-Dover, Ohio Micropolitan Statistical Area
- Sandusky, Ohio Micropolitan Statistical Area
- Norwalk, Ohio Micropolitan Statistical Area



Findings



Found: People forget to bring their bags into the store.

Next Step: How do we remind them to bring the reusable bags with them into the store?



Found: People do not have a place to fill their reusable water bottle.

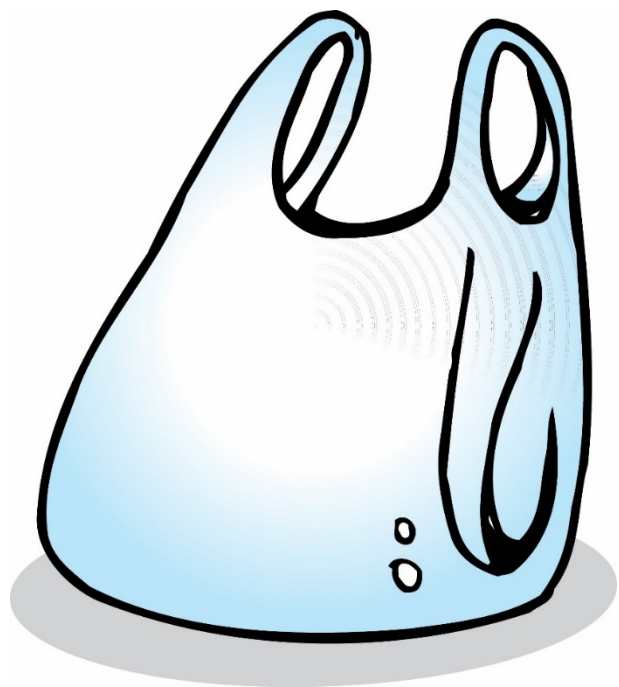
Next Step: Where can we place water refill stations to remove this barrier?



Found: Specific user group that may be difficult to reach.

Next Step: Gather more information on the process of smoking cigar tips.

Next Steps



VS



Will behavior change?

- *Intercept Surveys*

- ❖ Ask customers if reminder strategies encourage them to bring their own bags

- *Bag Use*

- ❖ Determine use of single-use plastic bags before and after project

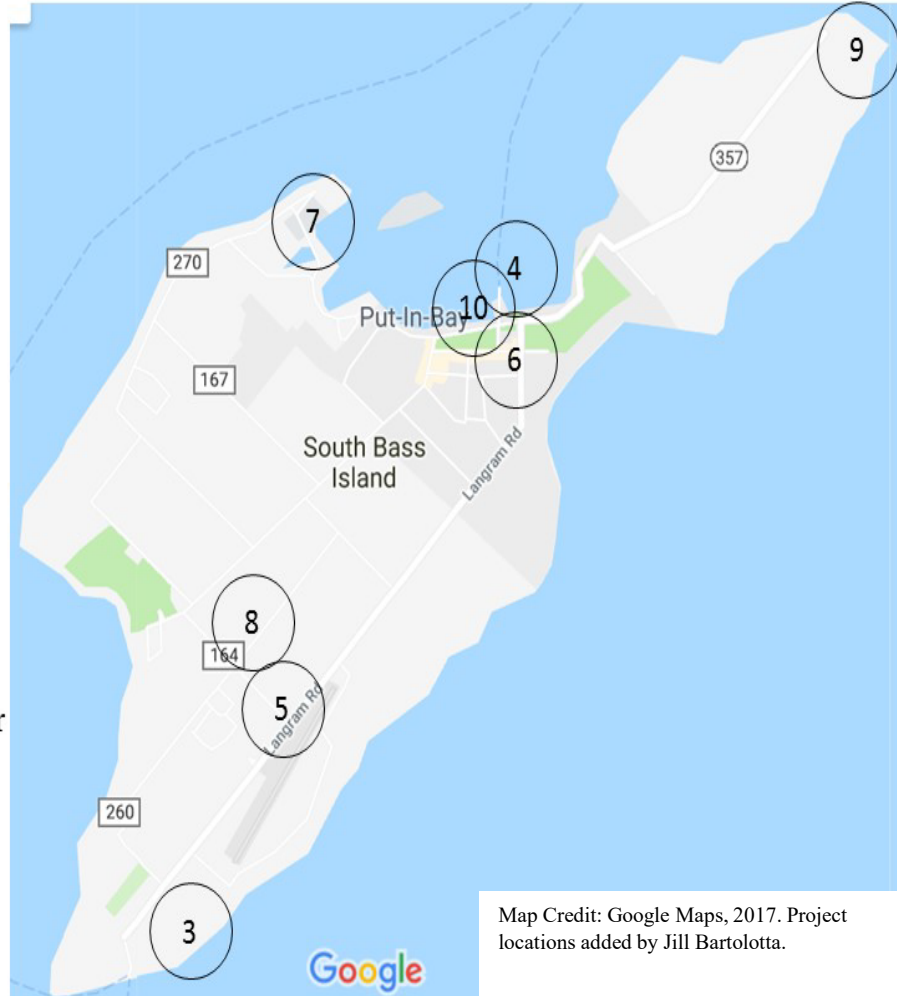
- *Recycling Practices*

- ❖ What do stores do with the bags they get for recycling?
- ❖ Will recycling of bags increase or decrease with project?

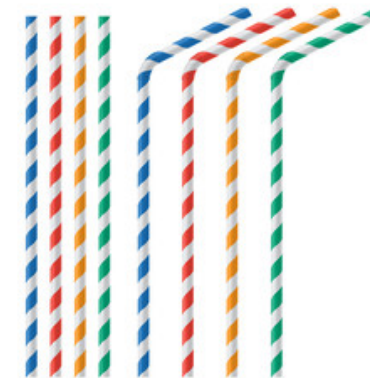
Talking with Our Tourists: A Marine Debris Awareness Initiative

South Bass Island, OH

- 3 Miller Ferry Put-in-Bay Island Dock
- 4 Jet Express Island Dock
- 5 Island Transportation and Put-in-Bay Tour Train Operations Building
- 6 Perry's Victory and International Peace Memorial Visitors Center
- 7 The Ohio State University Stone Laboratory Aquatic Visitors Center
- 8 Lake Erie Islands Nature and Wildlife Center
- 9 Put-in-Bay Township Park District (Scheeff East Point Nature Preserve)
- 10 The Boardwalk Family of Restaurants



Map Credit: Google Maps, 2017. Project locations added by Jill Bartolotta.



STONE
LABORATORY



THE OHIO STATE
UNIVERSITY



Support for the Project

Transportation Partners



Island Taxi Services
Put-in-Bay Tour Train

Restaurant Partners



Education Partners



Lake Erie Island Nature
and Wildlife Center

Other Island Partners



Put-in-Bay Township
SERVING OUR ISLAND COMMUNITIES

Boating Partners



Put-in-Bay Yacht Club

State Partners



Beach Cleanup Locations

1

Miller Ferry Mainland Dock, Port Clinton, OH



South Bass Island, OH

2 Miller Ferry Put-in-Bay Island Dock

3 Downtown Area
(Jet Express Island Dock and The Boardwalk Family of Restaurants)

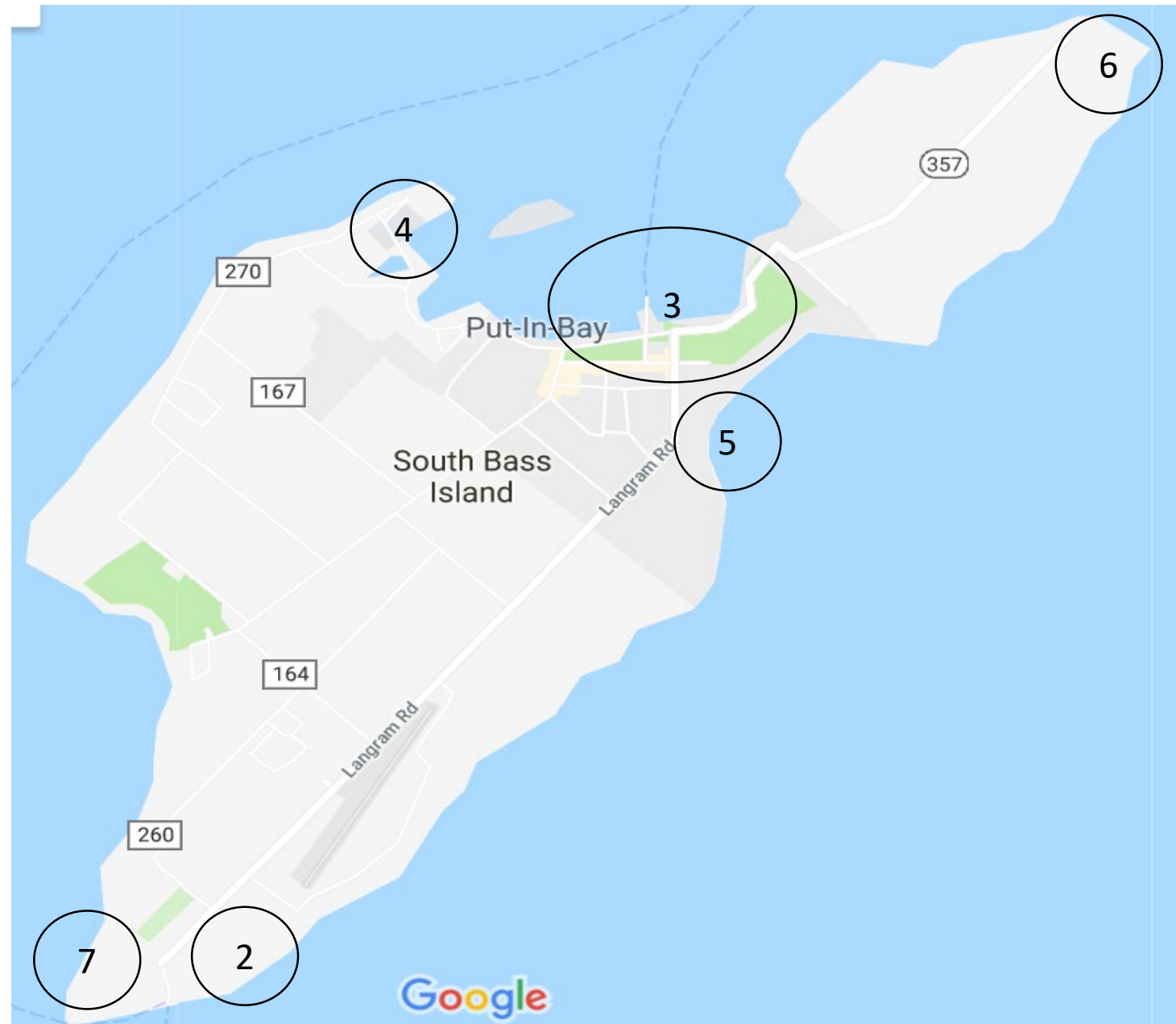
4 The Ohio State University Stone Laboratory Aquatic Visitors Center

Volunteer Cleanup Locations

5 Bathing Beach

6 Scheeff East Point Nature Preserve)

7 South Bass Island State Park



Beach Cleanups Results

Cleanups: 20

**Pounds
Removed: 203**

**Acres Restored:
28**

Cigarettes: 1568



Plastic bottle caps: 119



Plastic or foam
pieces: 629



What is the data telling us?



Unique Items



Will behavior change?

■ *Coastal Litter*

- ❖ Pre and post cleanups to look at litter profile
- ❖ Surveys to volunteers when they return home

■ *Restaurants*

- ❖ Focus group with restaurant staff
- ❖ Straw purchase information from restaurants

■ *Recreational Boaters*

- ❖ Surveys to boaters

■ *Tourists*

- ❖ Online surveys to people leaving the island while on the ferry
- ❖ Postcard sent to AVC visitors to remind them to take online survey

Communicating for a Clean Future

- Contest for high school age students in coastal Ohio, USA (Lake Erie)
- Complete one marine debris lesson (provided)
- Write 750 word essay
- Develop Public Service Announcements: ~1 min.
- Launched in fall; Due mid-March

<https://marinedebris.noaa.gov/outreach/communicating-clean-future-ohio-marine-debris-challenge>

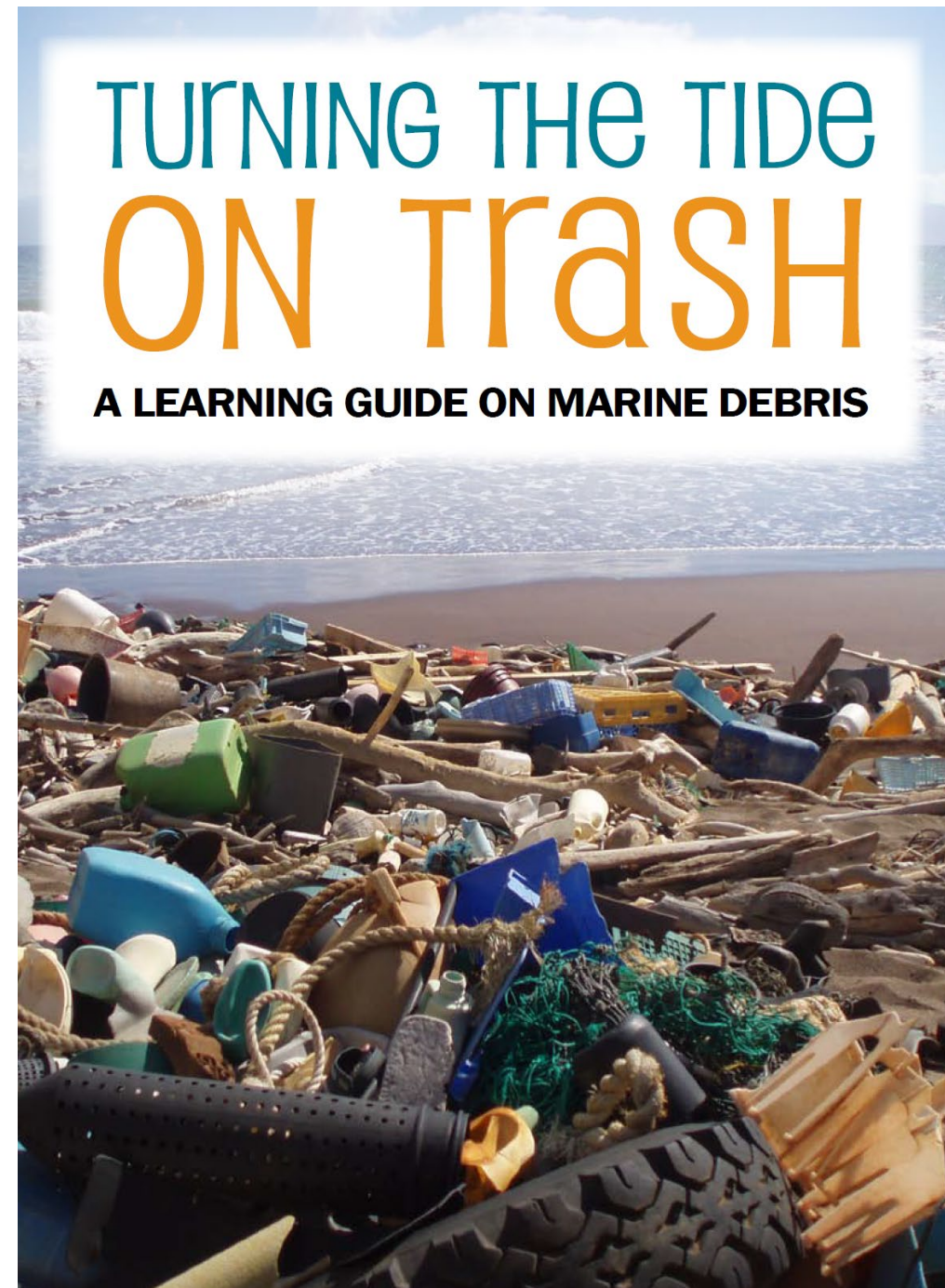


Partners



Contest Development

- ❖ Initiated in 2015
 - U.S. House of Representatives – Marcy Kaptur
 - Environmental competition interest with partners
- ❖ Modeled from “Communicating for a Clean Future” lesson in *Turning the Tide on Trash*
- ❖ Marine Debris Topic: Adapted to freshwater
 - Not a well-known term in education in the GL.
 - Many lessons are ocean specific



Contest Development

- ❖ Adapted existing curricula:
 - A Degrading Experience (*Turning the Tide on Trash*)
 - A Scientific Cleanup (*Turning the Tide on Trash*)
 - Microplastics Investigation (*An Educator's Guide to Marine Debris*)
- ❖ Aligned to state standards
- ❖ Advertised via websites & letters
- ❖ Suggested calendar of events for



Contest Requirements

- ❖ Eligibility
 - Grades 9-12 in coastal Ohio
 - Individually or in groups no more than 10 students
 - No limitation on the number of entries a classroom, school, or organization may submit
- ❖ Complete one of three lessons
- ❖ One 750 word essay per group
- ❖ Develop 30s to 1 min PSA
- ❖ Avoid brand/product names
- ❖ Submit:
 - Entry form
 - Student releases
 - Script
 - .mp4 PSA
 - Essay



Prizes!

❖ All Winners:

- Cedar Point Entry
- Plaque
- Reusable water bottles
- PSAs featured on organizational websites and other forms of media

❖ First Place:

- Fieldtrip to OSU's F.T. Stone Laboratory on Gibraltar Island, OH, including roundtrip passage on Miller Ferry

❖ Second Place:

- Admission to a tour/educational center in their local area

❖ Third Place:

- Student gift bags featuring products from sponsoring organizations



PSA Marine Debris Video Website

First Place

https://marinedebris.noaa.gov/sites/default/files/videos/original/FirstPlace_PHS2017.mp4

All videos

<https://marinedebris.noaa.gov/multimedia/video>

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Questions?



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